If you are using a printed copy of this procedure, and not the on-screen version, then you <u>MUST</u> make sure the dates at the bottom of the printed copy and the on-screen version match.

The on-screen version of the Collider-Accelerator Department Procedure is the Official Version.

Hard copies of all signed, official, C-A Operating Procedures are kept on file in the C-A ESHQ

Training Office, Bldg. 911A.

C-A OPERATIONS PROCEDURES MANUAL

ATTACHMENT

4.120.54.b U-Down & V-Primary (PEER 25) Gate Tests

C-A-Ol	PM Procedures in v	which this Attachmen	at is used.
4.120.54	1		
	Hand Proce	essed Changes	
HPC No.	<u>Date</u>	Page Nos.	<u>Initials</u>
		Signature on F er-Accelerator Depar	

V. Castillo

4.120.54.b U-Down & V-Primary (PEER 25) Gate Tests

PASS SEMI-ANNUAL ACCEPTANCE TEST PROTOCOL

Division A Software Filename and Checksum: Title:	Checksum:
Division B Software Filename and Checksum: Title:	Checksum:
<u>Initial testing complete</u> :	
Test Team Leader's Name (Print):	Life Number:
Test Team Leader's Name (Sign):	Date:/
Acceptance test procedure complete (following repairs and retesting	if required):
Test Team Leader's Name (Print):	Life Number:
Test Team Leader's Name (Sign):	Date:/
<u>Test results reviewed by</u> :	
Safety Section Head's Name (Print):	Life Number:
Safety Section Head's Name (Sign):	/
Test results accepted by Radiation Safety Committee:	
RSC Member's Name (Print):	Life Number:
RSC Member's Name (Sign):	/

1.1 CONDUCT Visual check on Peer 25 gates following Table-1, below

	Micro	Switch	Elec	Gate		Gate F	unctions		Verify	Inspn
Gate	Align	Opern	Wiring	Box	Lights	Open	Self- Closing	Latch	all x's Corr.	O.K. Init.
UGE2							Closing			
UGE3										
UED1										
UGI1										
VPGE1										

Legend: Tick = O.K. x = Problem N/A = Not Applicable

Table 1: Summary of Physical Inspection of Peer 25 Gates

1.2 Test of Entry Gate at UGE2

VERIFY	Entry Gate at UGE2 has been inspected	
STATION	One Personnel inside gate	
PLACE	PEER 25 in Controlled Access (MODE 16)	
VERIFY	PEER 25 is in Controlled Access	MODE 16
VERIFY	The Exterior gate box Controlled Access light is	ON
OPEN	Gate UGE2 with Simultaneous Release and #5	
	CA Key	
VERIFY	Simultaneous Release Buzzer	SOUNDS
VERIFY	Gate UGE2 is	OPEN
VERIFY	MCR sees the gate is	OPEN
HOLD	The Electric Strike micro switch	MADE
HOLD	Both of the gate micro switches	MADE
VERIFY	MCR sees the gate is	CLOSED
RELEASE	Div A micro switch	
VERIFY	MCR indicates Div A	OPEN
HOLD	Both of the gate micro switches	MADE
VERIFY	MCR sees the gate is	CLOSED
RELEASE	Div B micro switch	
VERIFY	MCR indicates Div B	OPEN
HOLD	Both of the gate micro switches	MADE
VERIFY	MCR sees the gate is	CLOSED
RELEASE	The Electric Strike micro switch	
VERIFY	MCR sees the gate is	OPEN
CLOSE	The gate	
VERIFY	MCR sees the gate is	CLOSED
ATTEMPT	Remote reset from MCR (keytrees must be captured)	
VERIFY	MCR sees Div A \square and Div B \square	RESET
OPEN	Gate from inside	
VERIFY	MCR sees Div $\mathbf{A} \square$ and Div $\mathbf{B} \square$	OPEN
CLOSE	The gate	

PLACE	PEER 25 in Restricted Access (Mode 8)	
VERIFY	PEER 25 is in Restricted Access	MODE 8
VERIFY	The Exterior gate box Restricted Access light is	ON
OPEN	Gate UGE2 from gate box with the Zero key	
VERIFY	Gate UGE2 is	OPEN
OPEN	Gate UGE2 with the #5 RC CA key	
VERIFY	Gate UGE2 is	OPEN
CLOSE	The gate	
PLACE	PEER 25 in Safe Access (Mode 2)	
VERIFY	PEER 25 is in Safe Access	MODE 2
VERIFY	The Exterior gate box Controlled Access light is	ON
OPEN	Gate UGE2 with Simultaneous Release and	
	Zero key	
VERIFY	Attempt to open gate UGE2 with Simultaneous	
	Release and Zero key	FAIL
OPEN	Gate UGE2 with Simultaneous Release and #5	
	CA Key	
VERIFY	Gate UGE2 is	OPEN
CLOSE	Gate UGE2	

☐ Check for acceptance of Test of Entry Gate at UGE2

1.3 Test of Entry Gate at UGE3

VERIFY	Entry Gate at UGE3 has been inspected	
STATION	One Personnel inside gate	
PLACE	PEER 25 in Controlled Access (MODE 16)	
VERIFY	PEER 25 is in Controlled Access	MODE 16
VERIFY	The Exterior gate box Controlled Access light is	ON
OPEN	Gate UGE3 with Simultaneous Release and #5	
	CA Key	
VERIFY	Simultaneous Release Buzzer	SOUNDS
VERIFY	Gate UGE3 is	OPEN
VERIFY	MCR sees the gate is	OPEN
HOLD	The Electric Strike micro switch	MADE
HOLD	Both of the gate micro switches	MADE
VERIFY	MCR sees the gate is	CLOSED
RELEASE	Div A micro switch	
VERIFY	MCR indicates Div A	OPEN
HOLD	Both of the gate micro switches	MADE
VERIFY	MCR sees the gate is	CLOSED
RELEASE	Div B micro switch	
VERIFY	MCR indicates Div B	OPEN
HOLD	Both of the gate micro switches	MADE
VERIFY	MCR sees the gate is	CLOSED
RELEASE	The Electric Strike micro switch	
VERIFY	MCR sees the gate is	OPEN
CLOSE	The gate	
VERIFY	MCR sees the gate is	CLOSED
ATTEMPT	Remote reset from MCR	
VERIFY	MCR sees Div A \square and Div B \square	RESET
OPEN	Gate from inside	

VERIFY	MCR sees Div $\mathbf{A} \square$ and Div $\mathbf{B} \square$	OPEN
CLOSE	The gate	
PLACE	PEER 25 in Restricted Access (Mode 8)	
VERIFY	PEER 25 is in Restricted Access	MODE 8
VERIFY	The Exterior gate box Restricted Access light is	ON
OPEN	Gate UGE3 from gate box with the Zero key	
VERIFY	Gate UGE3 is	OPEN
OPEN	Gate UGE3 with the #5 RC CA key	
VERIFY	Gate UGE3 is	OPEN
CLOSE	The gate	
PLACE	PEER 25 in Safe Access (Mode 2)	
VERIFY	PEER 25 is in Safe Access	MODE 2
VERIFY	The Exterior gate box Controlled Access light is	ON
OPEN	Gate UGE3 with Simultaneous Release and Zero	
	key	
VERIFY	Attempt to open gate UGE3 with Simultaneous	
	Release and Zero key	FAIL
OPEN	Gate UGE3 with Simultaneous Release and #5	
	CA Key	
VERIFY	Gate UGE3 is	OPEN
CLOSE	Gate UGE3	
	A CT A CT A CLA ALICES	

$\begin{tabular}{ll} \Box & Check for acceptance of Test of Entry Gate at UGE3 \end{tabular}$

1.4 Test of Gate at UGI1 (U-up exit to U-dn)

	VERIFY	Gate at UGI1 has been inspected	
	PLACE	PEER 23 in Restricted Access (MODE 8)	
	VERIFY	PEER 23 is in RA	MODE 8
	PLACE	PEER 25 in Controlled Access (MODE 16)	
	VERIFY	PEER 25 is in CA	MODE 16
	VERIFY	The gate box CA light is	ON
	PLACE	PEER 25 in Restricted Access (MODE 8)	
	VERIFY	PEER 25 is in RA	MODE 8
	VERIFY	Attempt to open Gate UGI1 with Zero key is	SUCCESSFUL
	VERIFY	MCR sees the gate is	OPEN
	HOLD	Both of the gate micro switches	MADE
			GT 0 GTT
	VERIFY	MCR sees the gate is	CLOSED
	RELEASE	Div A micro switch	0.000.
	VERIFY	MCR indicates Div A	OPEN
	HOLD	Both of the gate micro switches	MADE
	VERIFY	MCR sees the gate is	CLOSED
	RELEASE	Div B micro switch	0.000
	VERIFY	MCR indicates Div B	OPEN
	HOLD	Both of the gate micro switches	MADE
	VERIFY	MCR sees the gate is	CLOSED
	CLOSE	The gate	
	VERIFY	MCR sees the gate is	CLOSED
	VERIFY	The U-down Gate Reset light is	OFF
	DI 1 CE	DEED 44: G . W. L. G. GEODE 40	
_	PLACE	PEER 23 in Controlled Access (MODE 16)	MODE 16
	VERIFY	MCR sees PEER 23 is in CA (U-up keytree broken)	MODE 16

	RESET VERIFY VERIFY OPEN VERIFY VERIFY CLOSE	The gate with #7 Sweep key at U-down gate box MCR sees the gate is The U-down gate box Gate Reset light is The gate MCR sees the gate is The U-down Gate Reset light is The gate	RESET ON OPEN OFF
	PLACE VERIFY VERIFY	PEER 25 in Safe Access (Mode 2) PEER 25 is in Safe Access The U-dn gate box Controlled Access light is	MODE 2 ON
	PLACE VERIFY VERIFY	PEER 25 in Restricted Access (MODE 8) PEER 25 is in RA MCR sees Gate UGI1 is	MODE 8 CLOSED
	Check for a	acceptance of Test of Gate at UGI1 (U-up exit to U-dr	1)
Test of	Gate at UED1	(U-dn exit to W)	
	VERIFY VERIFY PLACE VERIFY	Gate has been inspected The door cannot be opened from the Outside PEER 25 in Controlled Access (MODE 16) PEER 25 is in Controlled Access	MODE 16
	OPEN VERIFY HOLD VERIFY	The door MCR sees the door is Both of the door micro switches MCR sees the door is	OPEN MADE CLOSED
	RELEASE VERIFY	Div A door micro switch MCR indicates Div A	OPEN
	HOLD VERIFY	Both of the door micro switches MCR sees the door is	MADE CLOSED
	RELEASE VERIFY CLOSE	Div B door micro switch MCR indicates Div B The door	OPEN
	VERIFY VERIFY RESET	MCR sees the door is The UED1 Door Reset light is The Door with #4 Sweep key at UED1 gate box	CLOSED OFF
	VERIFY VERIFY OPEN	MCR sees the UED1 door is The UED1 Door Reset light is The door	RESET ON
	VERIFY VERIFY CLOSE	MCR sees the door is The UED1 gate box Gate Reset light is The gate	OPEN OFF

1.5

Check for acceptance of Test of Gate at UED1 (U-dn exit to W)

1.6 Test of Entry Gate at VPGE1

□ VERIFY Entry Gate at VPGE1 has been inspected STATION One Personnel inside gate	
PLACE PEER 25 in Controlled Access (MODE 16)	MODE 16
 □ VERIFY PEER 25 is in Controlled Access □ VERIFY The Exterior gate box Controlled Access light is 	ON
OPEN Gate VPGE1 with Simultaneous Release and #5	
CA Key □ VERIFY Simultaneous Release Buzzer	SOUNDS
□ VERIFY Simultaneous Release Buzzer □ VERIFY Gate VPGE1 is	OPEN
□ VERIFY MCR sees the gate is	OPEN
HOLD The Electric Strike micro switch	MADE
HOLD Both of the gate micro switches	MADE
□ VERIFY MCR sees the gate is	CLOSED
RELEASE Div A micro switch ∨ERIFY MCR indicates Div A	OPEN
HOLD Both of the gate micro switches	MADE
□ VERIFY MCR sees the gate is	CLOSED
RELEASE Div B micro switch	
□ VERIFY MCR indicates Div B	OPEN
HOLD Both of the gate micro switches VERIFY MCR sees the gate is	MADE CLOSED
□ VERIFY MCR sees the gate is RELEASE The Electric Strike micro switch	CLOSED
□ VERIFY MCR sees the gate is	OPEN
CLOSE The gate	
□ VERIFY MCR sees the gate is	CLOSED
ATTEMPT Remote reset from MCR	DECET
□ VERIFY MCR sees Div A □ and Div B □OPEN Gate from inside	RESET
\Box VERIFY MCR sees Div A \Box and Div B \Box	OPEN
CLOSE The gate	·
DV 1 OF DEED AT 1 D 1 1 1 1 1 OF D 2	
PLACE PEER 25 in Restricted Access (Mode 8) ∨ERIFY PEER 25 is in Restricted Access	MODE 8
 □ VERIFY PEER 25 is in Restricted Access □ VERIFY The Exterior gate box Restricted Access light is 	ON
OPEN Gate VPGE1 from gate box with the Zero key	OIV
□ VERIFY Gate VPGE1 is	OPEN
CLOSE The gate	
ODEN Cota VDCE1 mids the #5 DC CA loss.	
OPEN Gate VPGE1 with the #5 RC CA key ∪ VERIFY Gate VPGE1 is	OPEN
U VERIFI Gate VI GET 15	OTEN
PLACE PEER 25 in Safe Access (Mode 2)	
□ VERIFY PEER 25 is in Safe Access	MODE 2
□ VERIFY The Exterior gate box Controlled Access light is	ON
OPEN Gate VPGE1 with Simultaneous Release and Zero key	
□ VERIFY Attempt to open gate VPGE1 with Simultaneous	
Release and Zero key	FAIL
OPEN Gate VPGE1 with Simultaneous Release and #5	
CA Key	OPEN
□ VERIFY Gate VPGE1 is CLOSE Gate VPGE1	OPEN
CLOSE Gate VPGE1	

[☐] Check for acceptance of Test of Entry Gate at VPGE1

END OF TEST PROCEDURE

TTL: Sign for completion of initial testing:	
	Date://
TTL: Sign for completion of final testing:	
Date: //	

8